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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,504	10/15/2003	Fabrice Le Leannee	01807.002409.	4600
5514 7590 12/05/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER MOTSINGER, SEAN T	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 12/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Interview Summary</b>	Application No.	Applicant(s)	
	10/684,504	LE LEANNEC ET AL.	
	Examiner	Art Unit	
	Sean Motsinger	2624	

All participants (applicant, applicant's representative, PTO personnel):

(1) Sean Motsinger.

(3) Edward Kmett.

(2) Jingge Wu.

(4) \_\_\_\_\_.

Date of Interview: 11/28/2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: Deshpade et al, "HTTP Streaming of Jpeg2000 Images".

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Claim 1 was discussed with regard to patentability arguments presented to the Applicant, (see attached arguments) no agreement was reached on allowability of claims. Suggestions for possible amendments were made but no specific language was agreed upon.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

JINGGE WU  
SUPERVISORY PATENT EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

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**FACSIMILE COVER SHEET**

**TO:** Examiner S. Motsinger  
United States Patent and Trademark Office  
Group Art Unit 2624

**FROM:** Edward A. Kmett, Reg. No. 42,746

**RE:** U.S. Application No.: 10/684,504  
Attorney Docket No.: 01807.002409.

**FAX NO.:** (571) 270-2237

**DATE:** November 27, 2007

**NO. OF PAGES:** 4  
(including cover page)

**TIME:**

3:15 p

**SENT BY:**

mff

**MESSAGE**

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PTOL-413A (09-08)  
Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

### Applicant Initiated Interview Request Form

Application No.: 10/084,504 First Named Applicant: LeLanne  
Examiner: S. Motsinger Art Unit: 2624 Status of Application: Final Off  
7/31/07

#### Tentative Participants:

(1) Edward Kmett (2) Ex: Motsinger  
(3) \_\_\_\_\_ (4) \_\_\_\_\_

Proposed Date of Interview: 11/28/07 Proposed Time: 3:00 (AM/PM) (PM)

#### Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☒ YES ☐ NO

If yes, provide brief description: See attached

### Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>§103</u>	<u>1,20</u>	<u>Neshpande</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

Brief Description of Arguments to be Presented:  
See Attached

An interview was conducted on the above-identified application on \_\_\_\_\_.

**NOTE:** This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Edward Kmett  
Applicant/Applicant's Representative Signature

\_\_\_\_\_  
Examiner/SPE Signature

Edward Kmett  
Typed/Printed Name of Applicant or Representative

42,746  
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

U.S. Application No. 10/684,504  
Attorney Docket No. 01807.002409.

### Patentability Points Of Discussion

The invention relates to selecting data of a compressed digital signal (image) for downloading image data from a server to a client computer. The invention aims to provide a more optimum amount of data being downloaded by taking into account various factors, including, for example, network bandwidth, and/or memory or processing capacity of the client. With this goal in mind, a server stores original image data in compressed format for different levels of gradation. The compressed image is broken up into smaller portions, commonly known as tiles at a first (top) level, precincts at a second level, and code-blocks at a third (smallest) level. As an example, an image Fig. 5 is broken down into four tiles (t0 to t3), with each tile being composed of four precincts (Prec. 0 to Prec. 3), and each precinct being composed of sixteen code-blocks. Thus, the entire image is composed of the data for the four tiles, the 16 precincts, and the 256 code-blocks. Dividing an image as shown in Fig. 5 is not new and is in fact known in the art. What is new, however, is how much data and which data for the image is to be downloaded to the client when a user requests data for a particular region of interest.

In the invention, when the user specifies a region of interest of an image, a determination is made of a set of data necessary to satisfy the request and which has not yet been received by the client, taking into account the data previously received. In other words, the invention looks at data already received and determines what additional data is needed to fulfill the request. The invention then determines at least one level of spatial granularity of data as a function of the region of interest and of the structure and organization of the data in the signal (image). In this determination, the invention differs from the prior art. Specifically, the invention makes the determination based on three factors: 1) the determined set of data necessary to satisfy the request, 2) the minimum quantity of data to be received by the client, and 3) the total quantity of data present in the signal (image). (See, e.g., page 20, line 26 to page 27, line 5 and Fig. 7). By referring to these three factors, the invention can better determine how much data can be provided so that, if a higher bandwidth or memory capacity is available, a greater amount of data as a function of the total quantity of data for the image signal can be provided to the client.

Deshpande is merely seen to teach the conventional JPEG2000 approach discussed in the background of the invention portion of the specification, and as such, suffers from the same problems described therein which are solved by the invention. In this regard, the Office Action alleges that Deshpande teaches the step of determining at least one level of spatial granularity which depends on the minimum quantity of data to be received by the second apparatus to reconstitute the region of interest and the total quantity of data present in the signal. It was also alleged that "the amount of data in the precinct is compared to the minimum data necessary." When following this position based on page 18, column 1, last paragraph to column 2, first paragraph, it seems that a "precinct" is considered as being the "total quantity of data" as

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Attorney Docket No. 01807.002409.

recited in the claims.

Referring to the foregoing passage of Deshpande, it recites: "For rectangular ROIs, the identified precincts/code-blocks will also form a rectangular region in each resolution subband. Depending on the progression order, a row of precincts may occupy a contiguous codestream segment. If some precincts only cover a few code-blocks of interest, then only the data for those code-blocks instead of the whole precinct may be retrieved and streamed." Thus, a rectangular region of interest ROI covers several precincts. However, the region of interest is not representative of all the data in the signal, in particular for the concerned level of spatial granularity. Thus, according to Deshpande, only the precincts that overlap the region of interest are taken into consideration, not the other precincts in the level of spatial granularity of concern. This means that, when determining the level of spatial granularity of data as a function of the region of interest and of the structure and organization of the data in the signal, in Deshpande, the total quantity of data present in the signal (which include other precincts than those covered by the region of interest at the level of spatial granularity of concern) is not taken into account in the determination step.

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